

IN THE CLAIMS:

Please AMEND claims 1, 2 and 5 as follows:

*Sub B1*  
1. (AMENDED) A compound semiconductor device comprising:

a substrate formed of a first compound semiconductor;

a graded channel layer formed on the substrate, and formed of a second compound semiconductor layer of which an energy band gap is made narrower inside than both ends by making a peak of distribution of one constituent element exist in the inside except the both ends in a thickness direction and doped with an impurity;

a barrier layer formed on the graded channel layer;

a gate electrode formed on the barrier layer to come into Schottky-contact with the barrier layer; and

*A1*  
a source electrode and a drain electrode formed on both sides of the gate electrode to flow a current into the graded channel layer.

2. (AMENDED) A compound semiconductor device according to claim 1, wherein the second compound semiconductor layer is composed of material that includes one constituent element which is added in the first compound semiconductor, and the one constituent element has a function which makes the energy band gap of the second compound semiconductor layer narrower than that of the first compound semiconductor.

Az 5. (AMENDED) A compound semiconductor device according to claim 4, wherein a peak of carrier density in the graded channel layer shifts to the substrate side from a center of layer thickness of the graded channel layer.